

Adcash Stock Task

In this task we have designed the API which takes the input from clients and on the bases of the specification specified in the task documentation we applied several filter to select the best company for the client. We have a given database where various company can fill there requirement of bid. Then customer need to send his requirement through API and we will publish the best suitable company for the client. We have also created database snapshot and log snapshot to look into the activity done by the application.

How to run the application

We can clone the project from <https://github.com/shubhardwaj/Stock.git> and then we need to set our server and then run project on the server.

After deploying application on the server. We can provide the API like.

<http://localhost:8080/AdCashStock/Stock?country=US&category=Automobile&basebid=10>

or I have also created a form where the user can provide its inputs. You will receive a name of the company. To view the activity of the application I have created a log file where you can view the operation takes place.

About Database :

As we have database already specified I have simply used the database which is given in the task specification. And for the database connectivity I have made a file name DBConnectionManager.java here we have specified the drivers and all url, user and password.

So if you are using your own database you can change the driver in case you are not using mysql. I have given the user name, password and URL as context parameter in deployment descriptor. So we need not to pass user url and password again and again.

Logging

For logging I used log4j library so please add this in to your build path so that the log can be support to your application. I have log all the info and error which may

occur during the application running. To create a log file in your system you need to make change in LoggerUtils.java.

LoggerUtil :

I have created this file to initiate the logging. This discuss about the patter in which the log are going to present in the log file. To get more specific information we can change the PatternLayout. This file is replacing log.properties file, normally used to initiate the logs.

Snapshots

I have created a snapshot classes which contains the database snapshot and logsnapshot.

DatabaseSnapshot will display the current values of database entities which we can call from the stock.java

Logsscreenshot will open up the log file where we have written the traces of application. You need to change the location of the file to open the file on your system.

Operations:

I made method for every operation that we need to do to get the best company to invest. Operations contains methods like:

requestReceived:= this method will print the request parameter in the log file.

baseTargeting:= this method checks the country and category of client's specification and return the list of selected companyid.

budgetCheck:= this method check whether the company has the budget for bid or not.

basebidCheck:= this checks which company have the budget more than our basebid price and then sort the company and return a company which has highest bid to make.

reduceBudget:= this method update our database.